BRUHATH BANGALORE MAHANAGARA PALIKE

Yalahanka ELECTRICAL DIVISION

PRE MEASUREMENT BOOK

Name of work :-Annual Maintenance and repairs of street lights in ward no 06 Package Y -06 of Yelahanka Zone.

Name of Contractror of nature of Agency:-Sri Pradeep kumar S.N. Pro of M/s Ganga Enterprises

Job Code No:-006-22-000007

Ref no and Date of commencement of work:-:- EE/Ele/YZ//WO/000006 /22-23 Date:01/04/2022

Aggrement No & date:-

Measurement Book No: **Page No:**

Bill NO :- 6th RA Bill **Bill Period : 01-01-2023 to 31-01-2023 (for 1 months)**

Sl. No.		Unit	Period in Months	Present Measurements		
				Qty	Tender Full Rate	Cost
1	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 36/40 W fluorescent tube light street lighting systems.	Each	1	79.00	34.16	2698.64
2	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 125 W HPMV light Park lighting systems.	Each	1	45.00	54.16	2437.20
3	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents for 250W HPSV street light lighting systems.	Each	1	4805.00	81.00	389205.00
4	Operation and Maintenance of street lighting system including replacement of damaged/failed/fused out components like Lamps, Tubes, Chokes, Ignitors, Capacitors, Switches , wires, Holders, Starters ,and switching ON/OFF of street lights at specified timing and Pole numbering, Preparing ward wise, street wise data bank furnishing maintenance reports ,every day etc, complete so as to ensure efficient burning of street lights detailed in tender documents 400 watts HPSV street light/High Mast lighting systems.	Each	1	120.00	91.66	10999.20

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5	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc.., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 24 watt LED park lighting systems.	Each	1	32.00	66.66	2133.12
6	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc.., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 65 watt LED street light lighting systems.	Each	1	727.00	91.66	66636.82
7	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/fused out compnents like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc.., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 90 watt LED street light lighting systems.	Each	1	19.00	108.33	2058.27
8	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/ fused out components like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc.., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 110/120 watt LED streetlight lighting system	Each	1	0.00	125.00	0.00
9	Operation and Maintenance of LED Street lighting system including replacement of damaged/failed/ fused out components like LED drivers MCPCB surge protective device switches, Wires Holders, Staters observing weather proofing technic confirming to IP 65 standards and switching ON/OFF of Street lights at specified timing and pole numbering. Preparing ward wise Street wise Street light data bank furnishing maintenance reports every day etc.., complete so as to ansure efficient burning of Street lights detailed in Tender documents for 150 watt LED street light /High mast lighting system	Each	1	0.00	150.00	0.00

10	Painting of existing Street lighting pole after scraping the oid paint and painted with suitable colour enamel/silver paint including copingflooting of the polec) Up to 5 Mtrs Street light pole		Nos	-	0.00	415.00	0.00
11	Painting of existing Street lighting pole after scraping the oid paint and painted with suitable colour enamel/silver paint including copingflooting of the polec) 8 Mtr and above Street light pole		Nos	-	0.00	650.00	0.00
12	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Micro processor release and Earth Fault as per IS-13947. (Icu = Ics) 100Amps 25kA.		Each	-	30.00	3850.00	115500.00
13	Supply and Installation / Fixing / Provision of Pole box with HRC Fuse / MCB provision and suitable connector / terminal for 3 Ph / 1 Ph connections with Loop-In & Loop-Out terminals for 10 Sqmm / 25 Sqmm 3.5 C Al/Ar / Cu/ Ar Cable and branch out 2.5 Sqmm 2 core Al/Cu PVC Insulated cable, enclosed in a Thermoplastic, Polystyrene enclosure, which should be shock proof, safe, IP65(Weather Proof), rust proof, dust proof, water proof having Internally Embedded Gasket with provision for cable entry through IP65 Thermoplastic, polyamide glands and/or grommets.260mmx210mmx116mm		Each	-	30.00	1850.00	55500.00
	GE/06/TC57/BN/00/04/19/SV	Bhuvaneshwari Nagara 4th Cross Dasarahalli	1				
	GE/06/TC57/BN/00/05/18/SV	Bhuvaneshwari Nagara 5th Cross Dasarahalli	1				
	GE/06/TC/ML/00/02/05/SV	Maruthi Layout, 2nd Cross Dasarahalli	1				
	GE/06/TC815/ML/01/12/22/SV	Maruthi Layout, 12th Cross Dasarahalli	1				
	GE/06/TC22/RH/05/01/05/SV	Rachenahalli main road, Thanisandra	1				
	GE/06/TC/AE/01/00/06/SV	Anam Enclave 1st Cross, Ashwath Nagara	1				
	GE/06/TC/AE/01/00/03/SV	Anam Enclave 2nd Cross, Ashwath Nagara	1				
	GE/06/TC/AE/03/00/09/SV	Anam Enclave 6th Cross, Ashwath Nagara	1				
	GE/06/TC/UMR/15/SV	Ukma Masjid road, Ashwath Nagara	1				
	GE/06/TC/UTR/01/SV	Near Krishna temple, Thanisandra	1				
	GE/06/TC/KTR/12/LED	Kateramma temple road Thanisandra	1				
	GE/06/TC/SSN/00/02/09/SV	Shiradi Sai Ratan Layout 2nd Cross Hegadenagara	1				
	GE/06/TC/HN/00/02/02/SV	2nd Cross Hegadenagara	1				

	GE/06/TC/SSN/00/03/14/SV	Shiradi Sai Ratan Layout 3rd Cross Hegadenagara	1				
	GE/06/TC/CL/00/01/01/LED	Chowdeshwari Layout 1st Cross Hegade Nagara	1				
	GE/06/TC408/AE/01/00/10/LED	Apoorva Enclave 1st Cross Hegade Nagara	1				
	GE/06/TC/TL/17/01/05/LED	Telecom layout 17thCross Thanisandra	1				
	GE/06/TC/MK/01/01/07/SV	Munikempanna Layout 1st Cross Dasarahalli	1				
	GE/06/TC/SN/GTR/01/SV	Shabari Nagara 1st Cross Hegade Nagara	1				
	GE/06/TC/ML/00/02/02/SV	MCECHS Layout 2nd Cross Shivaramakaranatha Nagara	1				
	GE/06/TC/SNR/21/LED	Hegade Nagara 9th Cross	1				
	GE/06/TC/EMR/11/SV	Ex Servicemen Layout Hegadenagara	1				
	GE/06/TC/EML/01/02/SV	Ex Servicemen Layout 2nd Cross Hegadenagara	1				
	GE/06/TC/AL/01/02/SV	Anjanadhri Layout Thanisandra	1				
	GE/06/TC/BN/01/20//07/LED	Bhuvaneshwari Nagara 20th Cross Dasarahalli	1				
	VE/01/TC58/MN/01/00/15/LED	Maruthi Nagara 1st Main Yelahanka	1				
	VE/01/TC58/KL/01/00/01/0	Near Maruthi hospital Kondappa garden Maruthi Nagara	1				
	VE/01/TC39/GN/01/00/14/LED	Near MEC School Gandhi Nagara Yelahanka	1				
	VE/01/TC/YBR/00/05/LED	Near Old Post office Yelahanka Old Town	1				
	VE/05/TC307/SNL/01/00/01/SV	Srinagara Layout BSF Road Kattigenahalli	1				
			30				
14	Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated, PVC extruded Inner sheath armoured UG LT cable as per IS-1554 (Part-1) or IS-7098 Part-1, Armouring strip thickness in average +5% and resistivity 14 Ohms/Kms (Max) as per IS-3975 4 core 16 sqmm		Mtr	-	218.00	140.00	30520.00
15	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure 6 sqmm to 16 sqmm		Mtr	-	218.00	20.00	4360.00
	For MCCB 30 Nos X 6 Mtrs each	180 Mtrs					
	For Timers 7 Nos X 6 Mtrs each	42 Mtrs					

16	Supply and fixing of 4 pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.100 to 125Amps		Each	-	13.00	6200.00	80600.00
17	Supplying and fixing Microprocessor Based Astronomical timer Switch with using necessary bolts, nuts and washers.		Each	-	13.00	2859.00	37167.00
18	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 50-63 Amps SP		Each		15.00	623	9345.00
19	1.1 kV, LT Aerial Bunched Cable, confirming to IS-14255: 1995 XLPE insulation Parameter shall be as below. 1. Hot Set Test: a) Elongation under Load: 50% (Max) b) Permanent Elongation After Cooloing: 3% (Max) 2. Thermal Aging in oven: a) Tensile Strength: 16 N/mm² (Min) b) Elongation: 375% (Min) 3. Water Absorption Test: a) Water absorbed: 0.5 mg/cm² (Max) 4. Carbon Black Content shall be ranging from 2% to 3% 3x25 + 1x25 + 1x16 Sqmm Street light (Insulated Messenger cum Neutral)		KM		2.51	125000.00	313750.00
20	Stringing of 1.1 kV grade Aerial Bunched 3 Core cable of XLPE insulation of size (3x95) (Phase Conductor) + (1x70) (Insulated Messenger Neutral) + (1x25) (Street Light Control)		KM		2.51	10500.00	26355.00
	Manjunatha L/o TO M.S.Ramaiah north city L/o road						
	GE/06/TC/TMR/87/SV/2 TO GE/06/TC/TMR/88/SV/2	30 Mtrs					
	GE/06/TC/TMR/88/SV/2 TO GE/06/TC/TMR/89/SV/2	30 Mtrs					
	GE/06/TC/TMR/89/SV/2 TO GE/06/TC/TMR/90/SV/2	30 Mtrs					
	GE/06/TC/TMR/90/SV/2 TO GE/06/TC/TMR/91/SV/2	30 Mtrs					
	GE/06/TC/TMR/91/SV/2 TO GE/06/TC/TMR/92/SV/2	30 Mtrs					
	GE/06/TC/TMR/92/SV/2 TO GE/06/TC/TMR/93/SV/2	30 Mtrs					
	GE/06/TC/TMR/93/SV/2 TO GE/06/TC/TMR/94/SV/2	30 Mtrs					
	GE/06/TC/TMR/94/SV/2 TO GE/06/TC/TMR/95/SV/2	30 Mtrs					
	GE/06/TC/TMR/95/SV/2 TO GE/06/TC/TMR/96/SV/2	30 Mtrs					
	GE/06/TC/TMR/96/SV/2 TO GE/06/TC/TMR/97/SV/2	30 Mtrs					

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	GE/06/TC/TMR/97/SV/2 TO GE/06/TC/TMR/98/SV/2	30 Mtrs					
	GE/06/TC/TMR/98/SV/2 TO GE/06/TC/TMR/99/SV/2	30 Mtrs					
	GE/06/TC/TMR/99/SV/2 TO GE/06/TC/TMR/100/SV/2	30 Mtrs					
	GE/06/TC/TMR/100/SV/2 TO GE/06/TC/TMR/101/SV/2	30 Mtrs					
	GE/06/TC/TMR/101/SV/2 TO GE/06/TC/TMR/102/SV/2	30 Mtrs					
	Sub Total	**450 Mtr**					
	Kempegowda circle TO Rashtrothana, K.Narayanapura circle Hegade Nagara main road						
	RCC Pole Timer Box TO GE/06/TC/HMR/81/SV	30 Mtrs					
	GE/06/TC/HMR/81/SV TO GE/06/TC/HMR/82/SV	30 Mtrs					
	GE/06/TC/HMR/82/SV TO GE/06/TC/HMR/83/SV	30 Mtrs					
	GE/06/TC/HMR/83/SV TO GE/06/TC/HMR/84/SV	30 Mtrs					
	GE/06/TC/HMR/84/SV TO GE/06/TC/HMR/85/SV	30 Mtrs					
	GE/06/TC/HMR/85/SV TO GE/06/TC/HMR/86/SV	30 Mtrs					
	GE/06/TC/HMR/86/SV TO GE/06/TC/HMR/87/SV	30 Mtrs					
	GE/06/TC/HMR/87/SV TO GE/06/TC/HMR/88/SV	30 Mtrs					
	GE/06/TC/HMR/88/SV TO GE/06/TC/HMR/89/SV	30 Mtrs					
	GE/06/TC/HMR/89/SV TO GE/06/TC/HMR/90/SV	30 Mtrs					
	GE/06/TC/HMR/90/SV TO GE/06/TC/HMR/91/SV	30 Mtrs					
	GE/06/TC/HMR/91/SV TO GE/06/TC/HMR/92/SV	30 Mtrs					
	GE/06/TC/HMR/92/SV TO GE/06/TC/HMR/93/SV	30 Mtrs					
	GE/06/TC/HMR/93/SV TO GE/06/TC/HMR/94/SV	30 Mtrs					
	GE/06/TC/HMR/94/SV TO GE/06/TC/HMR/95/SV	30 Mtrs					
	Sub Total	**450 Mtr**					
	Hegde Nagara circle TO Sampigehalli cross road						
	GE/06/TC/HMR/51/SV TO GE/06/TC/HMR/52/SV	30 Mtrs					
	GE/06/TC/HMR/52/SV TO GE/06/TC/HMR/53/SV	30 Mtrs					

CAC

GE/06/TC/HMR/53/SV TO GE/06/TC/HMR/54/SV	30 Mtrs						
GE/06/TC/HMR/54/SV TO GE/06/TC/HMR/55/SV	30 Mtrs						
GE/06/TC/HMR/55/SV TO GE/06/TC/HMR/56/SV	30 Mtrs						
GE/06/TC/HMR/56/SV TO GE/06/TC/HMR/57/SV	30 Mtrs						
GE/06/TC/HMR/57/SV TO GE/06/TC/HMR/58/SV	30 Mtrs						
GE/06/TC/HMR/58/SV TO GE/06/TC/HMR/59/SV	30 Mtrs						
GE/06/TC/HMR/59/SV TO GE/06/TC/HMR/60/SV	30 Mtrs						
GE/06/TC/HMR/60/SV TO GE/06/TC/HMR/61/SV	30 Mtrs						
GE/06/TC/HMR/61/SV TO GE/06/TC/HMR/62/SV	30 Mtrs						
GE/06/TC/HMR/62/SV TO GE/06/TC/HMR/63/SV	30 Mtrs						
GE/06/TC/HMR/63/SV TO GE/06/TC/HMR/64/SV	30 Mtrs						
GE/06/TC/HMR/64/SV TO GE/06/TC/HMR/65/SV	30 Mtrs						
GE/06/TC/HMR/65/SV TO GE/06/TC/HMR/66/SV	30 Mtrs						
GE/06/TC/HMR/66/SV TO GE/06/TC/HMR/67/SV	30 Mtrs						
GE/06/TC/HMR/67/SV TO GE/06/TC/HMR/68/SV	30 Mtrs						
GE/06/TC/HMR/68/SV TO GE/06/TC/HMR/69/SV	30 Mtrs						
GE/06/TC/HMR/69/SV TO GE/06/TC/HMR/70/SV	30 Mtrs						
GE/06/TC/HMR/70/SV TO RCC Pole Switch Control	30 Mtrs						
Sub Total	**600 Mtr**						
Sofia School TO Noor Nagar road Hegde Nagar main road							
VE/05/TC/HMR/106/SV TO VE/05/TC/HMR/107/SV	30 Mtrs						
VE/05/TC/HMR/107/SV TO VE/05/TC/HMR/108/SV	30 Mtrs						
VE/05/TC/HMR/108/SV TO VE/05/TC/HMR/109/SV	30 Mtrs						
VE/05/TC/HMR/109/SV TO VE/05/TC/HMR/110/SV	30 Mtrs						
VE/05/TC/HMR/110/SV TO VE/05/TC/HMR/111/SV	30 Mtrs						

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	VE/05/TC/HMR/111/SV TO VE/05/TC/HMR/112/SV	30 Mtrs					
	VE/05/TC/HMR/112/SV TO VE/05/TC/HMR/113/SV	30 Mtrs					
	VE/05/TC/HMR/113/SV TO VE/05/TC/HMR/114/SV	30 Mtrs					
	VE/05/TC/HMR/114/SV TO VE/05/TC/HMR/115/SV	30 Mtrs					
	VE/05/TC/HMR/115/SV TO VE/05/TC/HMR/116/SV	30 Mtrs					
	VE/05/TC/HMR/116/SV TO VE/05/TC/HMR/117/SV	30 Mtrs					
	VE/05/TC/HMR/117/SV TO VE/05/TC/HMR/118/SV	30 Mtrs					
	VE/05/TC/HMR/118/SV TO VE/05/TC/HMR/119/SV	30 Mtrs					
	VE/05/TC/HMR/119/SV TO VE/05/TC/HMR/120/SV	30 Mtrs					
	VE/05/TC/HMR/120/SV TO VE/05/TC/HMR/121/SV	30 Mtrs					
	VE/05/TC/HMR/121/SV TO VE/05/TC/HMR/122/SV	30 Mtrs					
	VE/05/TC/HMR/113/SV TO RCC Pole Timer Box	50 Mtrs					
	Sub Total	**620 Mtr**					
	Thirumenahalli gate TO Agrahara L/o gate Huz Bhavan road						
	VE/05/TC/HMR/44/SV TO VE/05/TC/HMR/45/SV	30 Mtrs					
	VE/05/TC/HMR/45/SV TO VE/05/TC/HMR/46/SV	30 Mtrs					
	VE/05/TC/HMR/46/SV TO VE/05/TC/HMR/47/SV	30 Mtrs					
	VE/05/TC/HMR/47/SV TO VE/05/TC/HMR/48/SV	30 Mtrs					
	VE/05/TC/HMR/48/SV TO VE/05/TC/HMR/49/SV	30 Mtrs					
	VE/05/TC/HMR/49/SV TO VE/05/TC/HMR/50/SV	30 Mtrs					
	VE/05/TC/HMR/50/SV TO VE/05/TC/HMR/51/SV	30 Mtrs					
	VE/05/TC/HMR/51/SV TO VE/05/TC/HMR/52/SV	30 Mtrs					
	VE/05/TC/HMR/52/SV TO VE/05/TC/HMR/53/SV	30 Mtrs					
	VE/05/TC/HMR/53/SV TO VE/05/TC/HMR/54/SV	30 Mtrs					
	VE/05/TC/HMR/54/SV TO VE/05/TC/HMR/55/SV	30 Mtrs					

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/05/TC/HMR/55/SV TO /05/TC/HMR/56/SV	30 Mtrs					
/05/TC/HMR/54/SV TO Pole Timer Box	50 Mtrs					
Total	**410 Mtr**					
Thirumenahalli gate TO Agrahara L/o gate Huz Bhavan road						
/06/TC/KMR/01/LED/4 TO /06/TC/KMR/02/LED/4	30 Mtrs					
/06/TC/KMR/02/LED/4 TO /06/TC/KMR/03/LED/4	30 Mtrs					
/06/TC/KMR/03/LED/4 TO /06/TC/KMR/04/LED/4	30 Mtrs					
Total	**90 Mtr**					
Grand Total	**2620 Mtr**					
TOTAL Rs						**1149265.25**
Add GST 12 % on item no 10 to 20						**80771.64**
TOTAL Rs						**1230036.89**
Fine imposed for non burning of street lights For the period						5700.00
As per street light agreement clause 2% will be deducted in						22985.31
GRAND TOTAL						**1120579.95**

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RTIFICATE

1.This is to certify that the work done is saticefactorily.

2.This is to certify that the bill amount calimed in this bill does not claimed in any of the previous bill.

Junior Engineer(Elec)
Yalahanka Division

Asst.Exe.Engineer(Elec)
Yalahanka Division